

ABSTRACT

It is an object of the present invention to finely inspect a dimension of a conductive pattern.

A sensor element 12a includes an MOSFET. A diffusion layer of the MOSFET having a larger surface area serves as a passive element, and is placed opposes to the conductive pattern. The passive element is formed continuously with a source of the MOSFET to be electrically conductive thereto. A gate of the MOSFET is connected to a vertical select section 14, and a drain of the MOSFET is connected to a lateral select section 13. When a sensor element 12a is selected by a timing generating section 15, a signal is transmitted from the vertical select section 14 to the gate to turn on the MOSFET. In this moment, if an inspection signal is output from a probe 22, the potential in the conductive pattern 101 is varied. Thus, a current flows from the source to the drain and then the current is transmitted to a signal processing section 16 through the lateral select section 13. By analyzing the position of the sensor element which outputs a detect signal, the position of the conductive pattern 101 in a circuit board 100 may be discriminated.